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PATENT APPLICATION

ATTORNEY DOCKET NO. 10012383-1

IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Thane M. Larson et al.

Confirmation No.:

Application No.: 09/924,163

Examiner: Tim T. Vo

Filing Date: August 7, 2001

Group Art Unit: 2112

Title: DEDICATED SERVER MANAGEMENT CARD WITH HOT SWAP FUNCTIONALITY

Mail Stop Appeal Brief-Patents
Commissioner For Patents
PO Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL OF APPEAL BRIEF

Transmitted herewith is the Appeal Brief in this application with respect to the Notice of Appeal filed on February 7, 2007.

The fee for filing this Appeal Brief is (37 CFR 1.17(c)) $500.00.

(complete (a) or (b) as applicable)

The proceedings herein are for a patent application and the provisions of 37 CFR 1.136(a) apply.

☐ (a) Applicant petitions for an extension of time under 37 CFR 1.136 (fees: 37 CFR 1.17(a)-(d)) for the total number of months checked below:

☐ 1st Month $120	☐ 2nd Month $450	☐ 3rd Month $1020	☐ 4th Month $1590

☐ The extension fee has already been filed in this application.

☒ (b) Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

Please charge to Deposit Account 08-2025 the sum of $ 500. At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account 08-2025 pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account 08-2025 under 37 CFR 1.16 through 1.21 inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees. A duplicate copy of this sheet is enclosed.

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Date of facsimile: MARCH 29, 2007

Typed Name: Jeff A. Holmen

Signature: Jeff A. Holmen

Respectfully submitted,

Thane M. Larson et al.

By Jeff A. Holmen

Jeff A. Holmen

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Rev 10/05 (ApiBrief)

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicant:	Thane M. Larson et al.	Examiner:	Tim T. Vo
Serial No.:	09/924,163	Group Art Unit:	2112
Filed:	August 7, 2001	Docket No.:	10012383-1 / H300.167.101
Due Date:	**April 7, 2007**		
Title:	DEDICATED SERVER MANAGEMENT CARD WITH HOT SWAP FUNCTIONALITY		

APPEAL BRIEF UNDER 37 C.F.R. §41.37

Mail Stop Appeal Brief – Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir/Madam:

This Appeal Brief is submitted in support of the Notice of Appeal filed on February 7, 2007, appealing the final rejection of claims 1-20 of the above-identified application as set forth in the Final Office Action mailed November 14, 2007.

The U.S. Patent and Trademark Office is hereby authorized to charge Deposit Account No. 08-2025 in the amount of $500.00 for filing a Brief in Support of an Appeal as set forth under 37 C.F.R. §41.20(b)(2). At any time during the pendency of this application, please charge any required fees or credit any overpayment to Deposit Account No. 08-2025.

Appellant respectfully requests consideration and reversal of the Examiner's rejection of pending claims 1-20.

Appeal Brief to the Board of Patent Appeals and Interferences
Applicant: Thanc M. Larson et al.
Serial No.: 09/924,163
Filed: August 7, 2001
Docket No.: 10012383-1
Title: DEDICATED SERVER MANAGEMENT CARD WITH HOT SWAP FUNCTIONALITY

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REAL PARTY IN INTEREST

The real party in interest is Hewlett-Packard Development Company, LP having a principal place of business at 20555 S.H. 249 Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holdings, LLC.

RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences known to Appellant that will have a bearing on the Board's decision in the present Appeal.

STATUS OF CLAIMS

In a Final Office Action mailed November 14, 2006, claims 1-20 were finally rejected. Claims 1-20 are pending in the application, and are the subject of the present Appeal.

STATUS OF AMENDMENTS

No amendments have been entered subsequent to the Final Office Action mailed November 14, 2006.

SUMMARY OF THE CLAIMED SUBJECT MATTER

The Summary is set forth as an exemplary embodiment as the language corresponding to independent claims 1, 8, and 14. Discussions about elements of claims 1, 8, and 14 can be found at least at the cited locations in the specification and drawings.

The present invention, as claimed in independent claim 1, provides a server system. The server system includes a plurality of printed circuit assemblies including a plurality of host processor cards. The server system includes a management card coupled to the plurality of printed circuit assemblies. The management card is dedicated to monitoring and managing operation of the server system, including monitoring and managing on-line insertion and removal of the printed circuit assemblies. The management card includes a LAN switch

configured to be coupled to the plurality of host processor cards and an external management network. (See, e.g., specification at page 3, line 7 to page 6, line 2; page 7, line 4 to page 18, line 6; Figures 1-3 and 5; reference numbers 100, 300A-300E, 320, and 532).

The present invention, as claimed in independent claim 8, provides a method of managing a server system. The method includes providing a plurality of host processor cards for running customer operating systems and applications. The method includes providing a dedicated management card that does not run customer operating systems and applications, the dedicated management card coupled to the plurality of host processor cards via a LAN switch on the management card. The method includes monitoring and managing operation of the plurality of host processor cards with the dedicated management card, including monitoring and managing hot swapping of the host processor cards. The method includes communicating with an external management network via the LAN switch. (See, e.g., specification at page 3, line 7 to page 6, line 2; page 7, line 4 to page 18, line 6; Figures 1-3 and 5; reference numbers 100, 300A, 300E, 320, and 532).

The present invention, as claimed in independent claim 14, provides a management-dedicated server management card for a server system having a plurality of removable cards. The server management card includes a memory for storing server management software. The server management card includes a controller coupled to the plurality of removable cards for monitoring and managing operation of the server system based on the server management software. The controller provides hot-swap functionality for the plurality of removable cards. The server management card includes a multiple-port LAN switch having at least four ports. The LAN switch is coupled to the controller and is configured to be coupled to a management connection of at least one of the plurality of removable cards. (See, e.g., specification at page 3, line 7 to page 6, line 2; page 7, line 4 to page 18, line 6; Figures 1-3 and 5; reference numbers 100, 300A-300E, 500, 504, and 532).

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

I. Claims 1-4, 6-10, 12-16, and 18-20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Wong, U.S. Patent No. 6,528,904 ("Wong") in view of Thornton, U.S. Publication No. 2004/0225794 ("Thornton")

II. Claims 5, 11, and 17 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Wong in view of Thornton, and further in view of Bassman, U.S. Patent No. 6,295,567 ("Bassman")

ARGUMENT

I. The Applicable Law

The Examiner has the burden under 35 U.S.C. §103 to establish a *prima facie* case of obviousness. *In re Fine,* 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Three criteria must be satisfied to establish a *prima facie* case of obviousness. First, the Examiner must show that some objective teaching in the prior art or some knowledge generally available to one of ordinary skill in the art would teach, suggest, or motivate one to modify a reference or to combine the teachings of multiple references. *Id.* Second, the prior art can be modified or combined only so long as there is a reasonable expectation of success. *In re Merck & Co., Inc.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Third, the prior art reference or combined prior art references must teach or suggest all of the claim limitations. *In re Royka,* 490 F.2d 981, 180 USPQ 580 (CCPA 1974). These three criteria are also set forth in §706.02(j) of the M.P.E.P.

II. Rejection of Claims 1-4, 6-10, 12-16, and 18-20 under 35 U.S.C. §103(a) as being unpatentable over Wong in view of Thornton

The Examiner rejected claims 1-4, 6-10, 12-16, and 18-20 under 35 U.S.C. §103(a) as being unpatentable over Wong, U.S. Patent No. 6,528,904 ("Wong") in view of Thornton, U.S. Publication No. 2004/0225794 ("Thornton"). Appellant submits that the Examiner has not established a *prima facie* case of obviousness of claims 1-4, 6-10, 12-16, and 18-20, and the rejection of claims 1-4, 6-10, 12-16, and 18-20 under 35 U.S.C. §103(a) should be withdrawn.

A. Rejection of Claims 1, 3, 4, 6, and 7 under 35 U.S.C. §103(a) as being unpatentable over Wong in view of Thornton

Independent claim 1 recites "wherein the management card includes a LAN switch configured to be coupled to the plurality of host processor cards and an external management network." The Examiner acknowledged that Wong does not teach or suggest the above-quoted limitations of independent claim 1:

> As for claims 1, 8, . . . Wong discloses all the limitations as above except wherein the management card includes a LAN switch configured to be coupled to the plurality of host processor cards and an external management network. However, Thornton discloses a LAN interface switching unit which is configurable to route encoded signals from one or more of a plurality of computer cards to one or more LAN devices (external) to the removable function module. (paragraph 24-29) (Final Office Action at para. no. 2, page 3).

Thornton discloses a computer system that includes various switch boards. (See, e.g., Thornton at Figure 8, and corresponding description). However, like the Wong reference, Thornton also does not teach or suggest a server management card that includes a LAN switch. In fact, there is no teaching or suggestion in Thornton regarding a server or a server management card, let alone a server management card that includes a LAN switch. The disclosure in Thornton regarding stand-alone switch boards or modules appears to add nothing to the Wong reference, which also discloses stand-alone switch blades 14, which "provide network switching of packets and routing for various protocol layers . . . . (Wong at col. 2, lines 36-38). The switch blades 14 disclosed in Wong are separate and distinct from the server management blades 10 and 12. There is no teaching or suggestion in Wong that the switch blades 10 and 12 could or should be incorporated into the server management blades 10 and 12. Likewise, there is no teaching or suggestion in Thornton that the switch boards disclosed therein could or should be incorporated into a server management card or server management blade. Wong and Thornton do not teach or suggest a management card that includes a LAN switch configured to be coupled to a plurality of host processor cards and an external management network, as recited in independent claim 1.

In the Response to Amendment section of the Final Office Action, the Examiner stated the following:

> In response to applicant's argument that neither Wong nor Thornton teach or suggest a server management card that includes a LAN switch configured to be coupled to the plurality of host processor cards and an external management network. Examiner respectfully disagrees. As Thornton notes at paragraphs 17-29 & figure 5(further cited for clarification), discloses the function module include interfacing cable connectors corresponding to each computer card slot. The cable connectors operable to couple to one cable for communicating with external systems(ie external management network". Furthermore, Thornton discloses the function module includes at least one data switch which is operable to perform data switching functions for the plurality of computer cards and a router which is operable to perform network routing function for the plurality of computer cards to external system. This is equivalent to applicant's claimed languages as "a Lan switch configured to be coupled to the plurality of host processor cards and an external management network". Thus, the prior art teaches the invention as claimed and the claims do not distinguish over the prior art as applied. (Final Office Action at para. no. 4, page 6).

As addressed above, the Examiner has acknowledged that Wong does not teach or suggest a management card that includes a LAN switch configured to be coupled to a plurality of host processor cards and an external management network, as recited in claim 1. (See, e.g., Final Office Action at para. no. 2, page 3). Thus, the issue to be decided is whether Thornton teaches or suggests this limitation. The Examiner appears to be arguing in the above block quote that the function module 602 disclosed in Thornton corresponds to the management card recited in claim 1. Function module 602 is not a management card, and there is no teaching or suggestion in Thornton that the function module 602 could or should include a management card. Function module 602 is not dedicated to monitoring and managing operation of a server system, as recited in claim 1. Function module 602 does not monitor and manage on-line insertion and removal of printed circuit assemblies of a server system, as recited in claim 1.

Thornton discloses that separate boards may be enclosed within function module 602, such as a switch board 806, and an Ethernet board 808. (See, e.g., Thornton at Figure 8, and corresponding description). As mentioned above, this disclosure in Thornton regarding stand-alone switch boards appears to add nothing to the Wong reference, which also discloses stand-alone switch blades 14, which "provide network switching of packets and routing for various protocol layers . . . . (Wong at col. 2, lines 36-38). There is no teaching or

suggestion in Thornton regarding a server or a server management card, let alone a server management card that includes a LAN switch.

In view of the above, Appellant respectfully submits that the Examiner has not established a *prima facie* case of obviousness of independent claim 1, and the rejection of independent claim 1 under 35 U.S.C. §103(a) should be withdrawn. Since dependent claims 3, 4, 6, and 7 further limit patentably distinct claim 1, and are further distinguishable over the cited references, claims 3, 4, 6, and 7 are believed to be allowable over the cited references. Appellant respectfully submits that the Examiner has not established a *prima facie* case of obviousness of dependent claims 3, 4, 6, and 7, and the rejection of dependent claims 3, 4, 6, and 7 under 35 U.S.C. §103(a) should be withdrawn.

B. Rejection of Claim 2 under 35 U.S.C. §103(a) as being unpatentable over Wong in view of Thornton

Dependent claim 2 recites "the server system of claim 1, wherein the management card includes a management processor, and wherein the LAN switch is coupled to management connections of the plurality of host processor cards, and management connections of the management processor. The Examiner indicated that Wong teaches the limitations of claim 2. (See, e.g., Final Office Action at para. no. 2, page 4). Appellant respectfully disagrees. If Wong does not teach or suggest a management card with a LAN switch configured to be coupled to a plurality of host processor cards, as acknowledged by the Examiner, then Wong does not teach or suggest the further limitation recited in claim 2 that the LAN switch is coupled to management connections of the plurality of host processor cards and management connections of the management processor.

Since dependent claim 2 further limits patentably distinct claim 1, and is further distinguishable over the cited references, claim 2 is believed to be allowable over the cited references. Appellant respectfully submits that the Examiner has not established a *prima facie* case of obviousness of dependent claim 2, and the rejection of dependent claim 2 under 35 U.S.C. §103(a) should be withdrawn.

C. Rejection of Claims 8-10, 12, and 13 under 35 U.S.C. §103(a) as being unpatentable over Wong in view of Thornton

Independent claim 8 recites "the dedicated management card coupled to the plurality of host processor cards via a LAN switch on the management card" and "communicating with an external management network via the LAN switch." The Examiner acknowledged that Wong does not teach or suggest the above-quoted limitations of independent claim 8:

> As for claims 1, 8, . . . Wong discloses all the limitations as above except wherein the management card includes a LAN switch configured to be coupled to the plurality of host processor cards and an external management network. However, Thornton discloses a LAN interface switching unit which is configurable to route encoded signals from one or more of a plurality of computer cards to one or more LAN devices (external) to the removable function module. (paragraph 24-29) (Final Office Action at para. no. 2, page 3).

Thornton discloses a computer system that includes various switch boards. (See, e.g., Thornton at Figure 8, and corresponding description). However, like the Wong reference, Thornton also does not teach or suggest a server management card that includes a LAN switch. In fact, there is no teaching or suggestion in Thornton regarding a server or a server management card, let alone a server management card that includes a LAN switch. The disclosure in Thornton regarding stand-alone switch boards or modules appears to add nothing to the Wong reference, which also discloses stand-alone switch blades 14, which "provide network switching of packets and routing for various protocol layers . . . . (Wong at col. 2, lines 36-38). The switch blades 14 disclosed in Wong are separate and distinct from the server management blades 10 and 12. There is no teaching or suggestion in Wong that the switch blades 10 and 12 could or should be incorporated into the server management blades 10 and 12. Likewise, there is no teaching or suggestion in Thornton that the switch boards disclosed therein could or should be incorporated into a server management card or server management blade. Wong and Thornton do not teach or suggest a dedicated management card coupled to a plurality of host processor cards via a LAN switch on the management card, nor do Wong and Thornton teach or suggest communicating with an external management network via a LAN switch on a management card, as recited in independent claim 8.

In the Response to Amendment section of the Final Office Action, the Examiner stated the following:

> In response to applicant's argument that neither Wong nor Thornton teach or suggest a server management card that includes a LAN switch configured to be coupled to the plurality of host processor cards and an external management network. Examiner respectfully disagrees. As Thornton notes at paragraphs 17-29 & figure 5(further cited for clarification), discloses the function module include interfacing cable connectors corresponding to each computer card slot. The cable connectors operable to couple to one cable for communicating with external systems(ie external management network". Furthermore, Thornton discloses the function module includes at least one data switch which is operable to perform data switching functions for the plurality of computer cards and a router which is operable to perform network routing function for the plurality of computer cards to external system. This is equivalent to applicant's claimed languages as "a Lan switch configured to be coupled to the plurality of host processor cards and an external management network". Thus, the prior art teaches the invention as claimed and the claims do not distinguish over the prior art as applied. (Final Office Action at para. no. 4, page 6).

As addressed above, the Examiner has acknowledged that Wong does not teach or suggest communicating with an external management network via a LAN switch on a management card, as recited in independent claim 8. (See, e.g., Final Office Action at para. no. 2, page 3). Thus, the issue to be decided is whether Thornton teaches or suggests this limitation. The Examiner appears to be arguing in the above block quote that the function module 602 disclosed in Thornton corresponds to the management card recited in claim 8. Function module 602 is not a management card, and there is no teaching or suggestion in Thornton that the function module 602 could or should include a management card. Function module 602 is not dedicated to monitoring and managing operation host processor cards of a server system, as recited in claim 8. Function module 602 does not monitor and manage hot swapping of host processor cards of a server system, as recited in claim 8.

Thornton discloses that separate boards may be enclosed within function module 602, such as a switch board 806, and an Ethernet board 808. (See, e.g., Thornton at Figure 8, and corresponding description). As mentioned above, this disclosure in Thornton regarding stand-alone switch boards appears to add nothing to the Wong reference, which also discloses stand-alone switch blades 14, which "provide network switching of packets and routing for

various protocol layers . . . . (Wong at col. 2, lines 36-38). There is no teaching or suggestion in Thornton regarding a server or a management card of a server system, let alone a management card that includes a LAN switch.

In view of the above, Appellant respectfully submits that the Examiner has not established a *prima facie* case of obviousness of independent claim 8, and the rejection of independent claim 8 under 35 U.S.C. §103(a) should be withdrawn. Since dependent claims 9, 10, 12, and 13 further limit patentably distinct claim 8, and are further distinguishable over the cited references, claims 9, 10, 12, and 13 are believed to be allowable over the cited references. Appellant respectfully submits that the Examiner has not established a *prima facie* case of obviousness of dependent claims 9, 10, 12, and 13, and the rejection of dependent claims 9, 10, 12, and 13 under 35 U.S.C. §103(a) should be withdrawn.

D. Rejection of Claims 14, 16, and 18-20 under 35 U.S.C. §103(a) as being unpatentable over Wong in view of Thornton

Independent claim 14 is directed to a management-dedicated server management card, and recites "a multiple-port LAN switch having at least four ports, the LAN switch coupled to the controller and configured to be coupled to a management connection of at least one of the plurality of removable cards." The Examiner acknowledged that Wong does not teach or suggest the above-quoted limitations of independent claim 14:

> As for claim 14, . . . Wong discloses all the limitations as above except a multiple-port LAN switch having at least four ports, the LAN switch coupled to the controller and configured to be coupled to a management connection of at least one of the plurality of removable cards. However, Thornton discloses a LAN interface switching unit which is configurable to route encoded signals from one or more of the plurality of computer cards to one or more LAN devices to the removable function module. (paragraph 24-29) (Final Office Action at para. no. 2, page 4).

Thornton discloses a computer system that includes various switch boards. (See, e.g., Thornton at Figure 8, and corresponding description). However, like the Wong reference, Thornton also does not teach or suggest a server management card that includes a LAN switch. In fact, there is no teaching or suggestion in Thornton regarding a server or a server management card, let alone a server management card that includes a LAN switch. The

disclosure in Thornton regarding stand-alone switch boards or modules appears to add nothing to the Wong reference, which also discloses stand-alone switch blades 14, which "provide network switching of packets and routing for various protocol layers . . .". (Wong at col. 2, lines 36-38). The switch blades 14 disclosed in Wong are separate and distinct from the server management blades 10 and 12. There is no teaching or suggestion in Wong that the switch blades 10 and 12 could or should be incorporated into the server management blades 10 and 12. Likewise, there is no teaching or suggestion in Thornton that the switch boards disclosed therein could or should be incorporated into a server management card or server management blade. Wong and Thornton do not teach or suggest a server management card with a multiple-port LAN switch having at least four ports, the LAN switch coupled to a controller and configured to be coupled to a management connection of at least one of a plurality of removable cards, as recited in independent claim 14.

In the Response to Amendment section of the Final Office Action, the Examiner stated the following:

> In response to applicant's argument that neither Wong nor Thornton teach or suggest a server management card that includes a LAN switch configured to be coupled to the plurality of host processor cards and an external management network. Examiner respectfully disagrees. As Thornton notes at paragraphs 17-29 & figure 5(further cited for clarification), discloses the function module include interfacing cable connectors corresponding to each computer card slot. The cable connectors operable to couple to one cable for communicating with external systems(ie external management network". Furthermore, Thornton discloses the function module includes at least one data switch which is operable to perform data switching functions for the plurality of computer cards and a router which is operable to perform network routing function for the plurality of computer cards to external system. This is equivalent to applicant's claimed languages as "a Lan switch configured to be coupled to the plurality of host processor cards and an external management network". Thus, the prior art teaches the invention as claimed and the claims do not distinguish over the prior art as applied. (Final Office Action at para. no. 4, page 6).

As addressed above, the Examiner has acknowledged that Wong does not teach or suggest a server management card with a multiple-port LAN switch having at least four ports, the LAN switch coupled to a controller and configured to be coupled to a management connection of at least one of a plurality of removable cards, as recited in claim 14. (See, e.g.,

Final Office Action at para. no. 2, page 4). Thus, the issue to be decided is whether Thornton teaches or suggests this limitation. The Examiner appears to be arguing in the above block quote that the function module 602 disclosed in Thornton corresponds to the management card recited in claim 14. Function module 602 is not a management card, and there is no teaching or suggestion in Thornton that the function module 602 could or should include a management card. Function module 602 is not dedicated to monitoring and managing operation of a server system based on server management software, as recited in claim 14. Function module 602 does not provide hot-swap functionality for removable cards of a server system, as recited in claim 14.

Thornton discloses that separate boards may be enclosed within function module 602, such as a switch board 806, and an Ethernet board 808. (See, e.g., Thornton at Figure 8, and corresponding description). As mentioned above, this disclosure in Thornton regarding stand-alone switch boards appears to add nothing to the Wong reference, which also discloses stand-alone switch blades 14, which "provide network switching of packets and routing for various protocol layers . . . . (Wong at col. 2, lines 36-38). There is no teaching or suggestion in Thornton regarding a server or a server management card, let alone a server management card that includes a LAN switch.

In view of the above, Appellant respectfully submits that the Examiner has not established a *prima facie* case of obviousness of independent claim 14, and the rejection of independent claim 14 under 35 U.S.C. §103(a) should be withdrawn. Since dependent claims 16 and 18-20 further limit patentably distinct claim 14, and are further distinguishable over the cited references, claims 16 and 18-20 are believed to be allowable over the cited references. Appellant respectfully submits that the Examiner has not established a *prima facie* case of obviousness of dependent claims 16 and 18-20, and the rejection of dependent claims 16 and 18-20 under 35 U.S.C. §103(a) should be withdrawn.

E. Rejection of Claim 15 under 35 U.S.C. §103(a) as being unpatentable over Wong in view of Thornton

Dependent claim 15 recites "the server management card of claim 14, wherein the LAN switch is coupled to the management connections of a plurality of the removable cards

for monitoring management LAN communications." The Examiner indicated that Wong teaches the limitations of claim 15. (See, e.g., Final Office Action at para. no. 2, page 4). Appellant respectfully disagrees. If Wong does not teach or suggest a management card with a LAN switch that is configured to be coupled to a management connection of at least one of the plurality of removable cards, as acknowledged by the Examiner, then Wong does not teach or suggest the further limitation recited in claim 15 that the LAN switch is coupled to the management connections of a plurality of the removable cards for monitoring management LAN communications.

Since dependent claim 15 further limits patentably distinct claim 14, and is further distinguishable over the cited references, claim 15 is believed to be allowable over the cited references. Appellant respectfully submits that the Examiner has not established a *prima facie* case of obviousness of dependent claim 15, and the rejection of dependent claim 15 under 35 U.S.C. §103(a) should be withdrawn.

III. Rejection of Claims 5, 11, and 17 under 35 U.S.C. §103(a) as being unpatentable over Wong in view of Thornton, and further in view of Bassman

Claims 5, 11, and 17 were rejected under 35 U.S.C. §103(a) as being unpatentable over Wong in view of Thornton and further in view of Bassman, U.S. Patent No. 6,295,567 ("Bassman"). Dependent claims 5, 11, and 17, are dependent on independent claims 1, 8, and 14, respectively. As addressed above, Wong and Thornton do not teach or suggest the above-quoted limitations of independent claims 1, 8, and 14. Bassman also does not teach or suggest these limitations of independent claims 1, 8, and 14.

Dependent claims 5, 11, and 17 are also further distinguishable over the cited references. With respect to these claims, the Examiner acknowledged that Wong in view of Thornton "does not expressly teach temperature sensor and controlling fan speed." (Final Office Action at para. no. 3, page 5). Bassman discloses an embedded controller 605 that controls the speed of each fan. (Bassman at col. 8, lines 42-43). However, Bassman includes no teaching or suggestion that the embedded controller 605, or any portion thereof, could or should be incorporated into a server management card as recited in the claims.

In the Response to Amendment section of the Final Office Action, the Examiner stated the following:

> Applicant argues that Thornton does not expressly teach temperature sensor and controlling fan speed. Bassman discloses an embedded controller 605 that controls the speed of each fan. However, Bassman includes no teaching or suggestion that the embedded controller 605 or any portion thereof could or should be incorporated into a management cards. Examiner respectfully disagrees. As Bassman notes at (col.8, lines 38-62, further cited for clarification, discloses the embedded controller monitors and controls temperature (fan speed) within the computer system via program stored in a memory. The embedded controller coupled to the system processor for generating interrupt to system processor in the even of a condition requiring the shut down of components of the computer system. This controller is incorporated into a management of system for controlling the system. It is clear that Bassman is an analogous art and it reads on the breadth of the claimed languages therefore it is properly stated in the rejection of record. (Final Office Action at para. no. 4, pages 6-7).

There is no disclosure in the above-cited portions of Bassman that teaches or suggests that the embedded controller 605, or any portion thereof, could or should be incorporated into a server management card.

Since dependent claims 5, 11, and 17 further limit patentably distinct claims 1, 8, and 14, respectively, and are further distinguishable over the cited references, claims 5, 11, and 17 are believed to be allowable over the cited references. Appellant respectfully submits that the Examiner has not established a *prima facie* case of obviousness of dependent claims 5, 11, and 17, and the rejection of dependent claims 5, 11, and 17 under 35 U.S.C. §103(a) should be withdrawn.

CONCLUSION

For the above reasons, Appellants respectfully submit that the cited references neither anticipate nor render obvious claims of the pending Application. The pending claims distinguish over the cited references, and therefore, Appellants respectfully submit that the rejections must be withdrawn, and respectfully request the Examiner be reversed and claims 1-20 be allowed.

Any inquiry regarding this Response should be directed to either Jeff A. Holmen at Telephone No. (612) 573-0178, Facsimile No. (612) 573-2005 or David A. Plettner at Telephone No. (408) 447-3013, Facsimile No. (408) 447-0854. In addition, all correspondence should continue to be directed to the following address:

IP Administration
Legal Department, M/S 35
HEWLETT-PACKARD COMPANY
P.O. Box 272400
Fort Collins, Colorado 80527-2400

Respectfully submitted,

Thane M. Larson et al.

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CERTIFICATE UNDER 37 C.F.R. 1.8:

The undersigned hereby certifies that this paper or papers, as described herein, are being transmitted via facsimile to Facsimile No. (571) 273-8300 on this 29th day of March, 2007.

By: _____
Name: Jeff A. Holmen

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CLAIMS APPENDIX

1.(Previously Amended) A server system comprising:

a plurality of printed circuit assemblies including a plurality of host processor cards;

a management card coupled to the plurality of printed circuit assemblies, the management card dedicated to monitoring and managing operation of the server system, including monitoring and managing on-line insertion and removal of the printed circuit assemblies; and

wherein the management card includes a LAN switch configured to be coupled to the plurality of host processor cards and an external management network.

2.(Previously Amended) The server system of claim 1, wherein the management card includes a management processor, and wherein the LAN switch is coupled to management connections of the plurality of host processor cards, and management connections of the management processor.

3.(Original) The server system of claim 1, and further comprising a backplane for connecting the plurality of printed circuit assemblies to the management card.

4.(Previously Presented) The server system of claim 3, wherein the plurality of host processor cards is configured to communicate status information to the management card via at least one I^2C bus routed through the backplane.

5.(Original) The server system of claim 1, and further comprising:

at least one cooling fan;

at least one temperature sensor; and

the management card configured to adjust the speed of the at least one cooling fan based on temperature data provided by the at least one temperature sensor.

6.(Original) The server system of claim 1, wherein the management card further comprises:

a plurality of LEDs for providing server status information.

7.(Original) The server system of claim 1, wherein the management card further comprises:

a plurality of serial ports for communicating with the management card.

8.(Previously Amended) A method of managing a server system comprising:

providing a plurality of host processor cards for running customer operating systems and applications;

providing a dedicated management card that does not run customer operating systems and applications, the dedicated management card coupled to the plurality of host processor cards via a LAN switch on the management card;

monitoring and managing operation of the plurality of host processor cards with the dedicated management card, including monitoring and managing hot swapping of the host processor cards; and

communicating with an external management network via the LAN switch.

9.(Original) The method of claim 8, and further comprising:

monitoring management LAN communications of the plurality of host processor cards with the management card.

10.(Original) The method of claim 8, and further comprising:

transmitting status information from the plurality of host processor cards to the management card via at least one I^2C bus.

11.(Original) The method of claim 8, and further comprising:

monitoring the temperature of the server system with the management card; and

adjusting the speed of at least one cooling fan with the management card based on temperature data.

12.(Original) The method of claim 8, and further comprising:

providing status information on the management card via a plurality of LEDs.

13.(Original) The method of claim 8, and further comprising:

communicating with the management card via at least one of a plurality of serial ports on the management card.

14.(Previously Amended) A management-dedicated server management card for a server system having a plurality of removable cards, the server management card comprising:

a memory for storing server management software;

a controller coupled to the plurality of removable cards for monitoring and managing operation of the server system based on the server management software, the controller providing hot-swap functionality for the plurality of removable cards; and

a multiple-port LAN switch having at least four ports, the LAN switch coupled to the controller and configured to be coupled to a management connection of at least one of the plurality of removable cards.

15.(Previously Presented) The server management card of claim 14, wherein the LAN switch is coupled to the management connections of a plurality of the removable cards for monitoring management LAN communications.

16.(Original) The server management card of claim 14, and further comprising:

at least one I^2C bus link coupled to the controller for receiving status information from the plurality of removable cards.

17.(Original) The server management card of claim 14, and further comprising:

an input for receiving server temperature information, the controller configured to adjust the speed of at least one server cooling fan based on received server temperature information.

18.(Original) The server management card of claim 14, and further comprising:

a plurality of LEDs for providing server status information.

19.(Original) The server management card of claim 14, and further comprising:

a plurality of serial ports for transmitting and receiving serial communications.

20.(Previously Presented) The server management card of claim 14, wherein the LAN switch is configured to communicate with an external management LAN.

Appeal Brief to the Board of Patent Appeals and Interferences
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EVIDENCE APPENDIX

None.

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RELATED PROCEEDINGS APPENDIX

None.